LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 – 2 (Canceled)

Claim 3 (Currently Amended) A method for managing a mortgage-backed securities index ~~according to Claim 2~~, comprising the steps of:

a. selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, said set of mortgaged-backed securities being selected from all outstanding mortgage-backed securities;

b. assigning a relative weight to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to the total outstanding principal on all securities within said selected set;

c. calculating a total return of said mortgage-backed securities index, said total return being based on said assigned relative weight for said each security, and a total return of said each security based on a same-day-settle price;

d. storing the calculated total return of said mortgage-backed securities index in an index database;

e. outputting the calculated total return of said mortgage-backed securities index to a user,

wherein said step of selecting a set of mortgage-backed securities further comprises aggregating said all outstanding mortgage-backed securities into a plurality of pools, each of said pools comprising mortgage-backed securities having the same coupon and the same original term; and calculating an inclusion criteria for each pool within said plurality of pools, and wherein said

inclusion criteria is given by the following equation: $x_{c,t} = \frac{\left[\sum_{a=\left\{\begin{array}{l} FNMA \\ GNMA \\ FHLMC \end{array}\right\}} \rho_{a,c,\,t}\right]}{\left[\sum_{\substack{a = FNMA, GNMA, \\ FHLMC \\ c \in Z \\ t = 180\ ,360}} \rho_{a,c,\,t}\right]}$,

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

Claim 4 (Original) A method for managing a mortgage-backed securities index according to Claim 3, further comprising steps of comparing said inclusion criteria for a particular pool to a threshold value, and including said particular pool in said selected set if said threshold is met.

Claim 5 (Original) A method for managing a mortgage-backed securities index according to Claim 4, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

Claim 6 (Original) A method for managing a mortgage-backed securities index according to Claim 4, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

Claim 7 (Original) A method for managing a mortgage-backed securities index according to Claim 3 wherein said relative weight of said each security within said selected set is given by the following equation: $w = \dfrac{\lfloor x_{c,\,t}\,\rho_{a,\,c,\,t} \rfloor}{\left[\sum_{\substack{a = \text{FNMA, GNMA,} \\ \text{FHLMC}}} \sum_{\substack{c \in Z \\ t = 180,360}} \rho_{a,\,c,\,t} \right]}$.

Claim 8 (Original) A method for managing a mortgage-backed securities index according to Claim 7, wherein said total return of said each security within said selected set on any given day t_2 is given by the following equation:

$$TR^{j}_{t_2} = \frac{-p_{t_1} + f_{t_1} p_{t_2} + \left[\left(1 - f_{t_1}\right) + \frac{c}{12} \right] \left[1 + r_{t_1} \frac{|d|}{360} \right]^{-k}}{p_{t_1}},$$

wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said security is issued by GNMA or FHLMC} \end{cases}$$

and

$$k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

Claim 9 (Original) A method for managing a mortgage-backed securities index according to Claim 8, wherein said sequence of monthly pay-down factors is given by the following equation:

$$f_i = \frac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$$, wherein $\rho_{\alpha,j}$ is the principal outstanding of pool α as of the first of month i, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month $i+1$.

Claim 10 (Original) A method for managing a mortgage-backed securities index according to Claim 9 wherein said same-day settle price is given by the following equation:

$$p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}},$$

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day t; wherein d_1 is the number of days into the month that 1-month forward standard PSA settle occurs; wherein d_2 is the number of days in between the purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

Claim 11 (Original) A method for managing a mortgage-backed securities index according to Claim 10 wherein said total return of said index from day t_1 in month k to day t_2 in month n is

given by the following equation: $TR|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1 + TR_i\right)\right]\left(1 + TR_{t_2}\right) - 1$,

TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the index for the month k, and wherein TR_i is the total return of the index for any intermediate month between k and n.

Claim 12 (Original) A method for managing a mortgage-backed securities index according to Claim 11 wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j},$$ wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j}$,

wherein $\{w_i^j\}_{j=1}^{n}$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

Claim 13 (Original) A method for managing a mortgage-backed securities index according to Claim 12, further comprising a step of determining a level of said mortgage-backed securities index, said level being given by the following equation: $\frac{P_t}{P_{00/00/00}} = 1 + TR|_{00/00/00}^{t}$, wherein $P_{00/00/00}$ is the starting level of said index, wherein $TR|_{00/00/00}^{t}$ is the total return of said index from start to the day t, and wherein P_t is the current level of the index.

Claim 14 (Original) A method for managing a mortgage-backed securities index according to Claim 13, wherein said starting level of said index is 100.

Claim 15 (Currently Amended) A method for managing a mortgage-backed securities index according to Claim [[1]] 3, further comprising a step of rebalancing said index by repeating said steps of selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, assigning said relative weight to each security within said selected set, and calculating said total return of said mortgage-backed securities index.

Claim 16 (Canceled).

Claim 17 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21 further comprising a storage ~~means~~ device, said storage ~~means~~ device storing data circulated within said system.

Claim 18 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21, wherein said set of instructions further includes a fourth set of instructions configured to classify ~~comprising a classification means, said classification means classifying~~ said data for all outstanding mortgage-backed securities in accordance with a coupon value, issuing agency and original term of each of said outstanding mortgage-backed securities.

Claim 19 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~18~~ 21, wherein said set of instructions further includes a fifth set of instructions configured to aggregate ~~comprising an aggregation means, said aggregation means aggregating~~ said outstanding mortgage-backed securities into a plurality of aggregated pools.

Claim 20 (Canceled)

Claim 21 (Currently Amended) A system for managing a mortgage-backed securities index, comprising:

an input device for inputting market data into said system, said market data comprising data for all outstanding mortgage-backed securities;

a processor operating under a set of instructions recorded on a processor-readable medium, the set of instructions including

a first set of instructions configured to select a set of mortgage-backed securities to be included in said mortgage-backed securities index, said set of mortgaged-backed securities being selected from said all outstanding mortgage-backed securities;

a second set of instructions configured to assign a relative weight to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to a total outstanding principal on all securities within said selected set; and

a third set of instructions configured to calculate a total return of said mortgage-backed securities index, said total return being calculated based on said assigned relative weight of said each security within said selected set, and a total return of said each security within said selected set based on a same-day-settle price;

an index database storing the calculated total return of said mortgage-backed securities index; and

an output device outputting the calculated total return of said mortgage-backed securities index to a user ~~according to Claim 20~~

wherein first set of instructions further comprises instructions configured to calculate an inclusion criterion for each of said aggregated pools, and wherein said inclusion criterion is given by the following equation:

$$x_{c,t} = \frac{\left[\sum_{a=\left\{\begin{smallmatrix}\text{FNMA}\\ \text{GNMA}\\ \text{FHLMC}\end{smallmatrix}\right\}} \rho_{a,c,t}\right]}{\left[\sum_{\substack{a=\text{FNMA, GNMA, FHLMC}\\ c\in Z\\ t=180\ldots360}} \rho_{a,c,t}\right]}$$

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

Claim 22 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim 21, wherein said set of instructions further includes a sixth set of instructions configured to compare ~~comprising means for comparing~~ said inclusion criterion for all of said aggregated pools to a threshold value, and ~~including~~ to include an aggregated pool in said selected set if said threshold is met.

Claim 23 (Original) A system for managing a mortgage-backed securities index according to Claim 22, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

Claim 24 (Original) A system for managing a mortgage-backed securities index according to Claim 22, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

Claim 25 (Original) A system for managing a mortgage-backed securities index according to Claim 21 wherein said relative weight of said each security within said selected set is given by the following equation: $w = \frac{\left[x_{c,t} \rho_{a,c,t} \right]}{\left[\sum_{\substack{a = FNMA, GNMA, FHLMC \\ c \in Z \\ t = 180, 360}} \rho_{a,c,t} \right]}$, wherein w is said relative weight of said each security within said selected set.

Claim 26 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21wherein said third set of instructions ~~total return means~~ further comprises instructions configured to calculate ~~means for calculating~~ said total return of said each security within said selected set.

Claim 27 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim 26 wherein said instructions configured to calculate said total return of said each security calculate ~~means for calculating calculates~~ said total return of said each security within said selected set on any given day t_2 in accordance with the following equation:

$$TR_{t_2}^{j} = \frac{-p_{t_1} + f_{t_1} p_{t_2} + \left[\left(1 - f_{t_1} \right) + \frac{c}{12} \right] \left[1 + r_{t_1} \frac{|d|}{360} \right]^{-k}}{p_{t_1}},$$

wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said each security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said each security is issued by GNMA or FHLMC} \end{cases}$$

and

$$k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

Claim 28 (Original) A system for managing a mortgage-backed securities index according to Claim 27, wherein said sequence of monthly pay-down factors is given by the following equation:

$$f_i = \frac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$$, wherein $\rho_{\alpha,i}$ is the principal outstanding of pool α as of the first of month *i*, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month *i+1*.

Claim 29 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21, wherein said same-day settle price is given by the following equation:

$$p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}},$$

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day *t*; wherein d_1 is the number of days into the month that 1-month forward standard PSA settle occurs; wherein d_2 is the number of days in between the

purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

Claim 30 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1 + TR_i\right)\right]\left(1 + TR_{t_2}\right) - 1$$

when $k < n-1$, wherein TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the index for the month k, and wherein TR_i is the total return of the index for any intermediate month between k and n.

Claim 31 (Original) A system for managing a mortgage-backed securities index according to Claim 30 wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_{i1}^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$, wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $$TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$,

wherein $\{w_i^j\}_{j=1}^{n}$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

Claim 32 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = TR_{t_2} - TR_{t_1}$$

when k=n, wherein TR_{t_1} is the total return of said index on the day t_1, and TR_{t_2} is the total return of said index on the day t_2.

Claim 33 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left(1 + TR_{t_2}\right) - 1$$

when $k=n-1$, wherein TR_{t_1} is the total return of said index on the day t_1, wherein TR_{t_2} is the total return of said index on the day t_2, and wherein TR_k is the total return of the index for the month k.

Claim 34 (Currently Amended) A system for managing a mortgage-backed securities index according to Claim ~~16~~ 21, wherein the set of instructions further comprises a seventh set of instructions configured to determine ~~further comprising level means, said level means determining~~ a level of said mortgage-backed securities index.

Claim 35 (Original) A system for managing a mortgage-backed securities index according to Claim 34 wherein said level is given by the following equation: $\frac{P_t}{P_{00/00/00}} = 1 + TR|^t_{00/00/00}$,

wherein P_t is said level of said mortgage-backed securities index on the day t,

wherein $P_{00/00/00}$ is a starting level of said index, and

wherein $TR|^t_{00/00/00}$ is the total return of said index from the starting date to the day t.

Claim 36 (Original) A system for managing a mortgage-backed securities index according to Claim 35, wherein said starting level of said index is 100.

Claim 37 - 39 (Canceled)

Claim 40 (Currently Amended) A mortgage-backed securities index ~~according to Claim 39~~, comprising:

a set of mortgage-backed securities, said set of mortgaged-backed securities being selected from all outstanding mortgage-backed securities; wherein a relative weight is assigned to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to the total outstanding principal on all securities within said selected set, and wherein said mortgage-backed securities index is characterized by a

total return of said mortgage-backed securities index, said total return being calculated based on said assigned relative weight for said each security, and a total return of said each security based on a same-day-settle price,

wherein said selected set of mortgage-backed securities is selected by aggregating said all outstanding mortgage-backed securities into a plurality of pools, each of said pools comprising mortgage-backed securities having the same coupon and the same original term; and calculating an inclusion criteria for each pool within said plurality of pools, and wherein said inclusion criteria is given by the following equation:

$$X_{c,t} = \frac{\left[\sum_{a=\left\{\begin{matrix}\text{FNMA}\\ \text{GNMA}\\ \text{FHLMC}\end{matrix}\right\}} \rho_{a,c,t}\right]}{\left[\sum_{\substack{a=\text{FNMA, GNMA, FHLMC}\\ c\in Z\\ t=180,360}} \rho_{a,c,t}\right]}$$

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

Claim 41 (Original) A mortgage-backed securities index according to Claim 40, wherein if said inclusion criteria for a particular pool is greater than a threshold value, said particular pool is included in said selected set.

Claim 42 (Original) A mortgage-backed securities index according to Claim 41, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

Claim 43 (Original) A mortgage-backed securities index according to Claim 41, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

Claim 44 (Original) A mortgage-backed securities index according to Claim 40 wherein said relative weight of said each security within said selected set is given by the following equation:

$$w = \frac{\left[x_{c,t} \; \rho_{a,c,t} \right]}{\left[\sum_{\substack{a = FNMA,GNMA_{II} \\ c \in Z \\ t = 180,360}} \rho_{a,c,t} \right]_{FHLMC}}.$$

Claim 45 (Original) A mortgage-backed securities index according to Claim 44, wherein said total return of said each security within said selected set on any given day t_2 is given by the following equation: $TR_{t_2}^{j} = \frac{-p_{t_1} + f_{t_1} p_{t_2} + \left[\left(1 - f_{t_1}\right) + \frac{c}{12} \right] \left[1 + r_{t_1} \frac{|d|}{360} \right]^{-k}}{p_{t_1}}$, wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said security is issued by GNMA or FHLMC} \end{cases}$$

and

$$k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

Claim 46 (Original) A mortgage-backed securities index according to Claim 45, wherein said sequence of monthly pay-down factors is given by the following equation:

$f_i = \dfrac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$, wherein $\rho_{\alpha,i}$ is the principal outstanding of pool α as of the first of month i, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month $i+1$.

Claim 47 (Original) A mortgage-backed securities index according to Claim 46, wherein said same-day settle price is given by the following equation:

$$p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}},$$

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day t; wherein d_1 is the number of days into the month that 1-month forward standard PSA settle occurs; wherein d_2 is the number of days in between the purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

Claim 48 (Original) A mortgage-backed securities index according to Claim 47, wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation: $TR\Big|_{t_1}^{t_2} = \left(1+TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1+TR_i\right)\right]\left(1+TR_{t_2}\right)-1$, wherein TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the index for the month k, and wherein TR_i is the total return of the Index for any intermediate month between k and n.

Claim 49 (Original) A mortgage-backed securities index according to Claim 48 wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_{i1}^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j},$$ wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $$TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j},$$

wherein $\{w_i^j\}_{j=1}^{n}$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

Claim 50 (Original) A mortgage-backed securities index according to Claim 49, wherein said index is further characterized by a level, said level being given by the following equation:

$\frac{P_t}{P_{00/00/00}} = 1 + TR|^{t}_{00/00/00}$, wherein $P_{00/00/00}$ is the starting level of said index, wherein $TR|^{t}_{00/00/00}$ is the total return of said index from start to the day t, and wherein P_t is the current level of the index.

Claim 51 (Original) A mortgage-backed securities index according to Claim 50, wherein said starting level of said index is 100.

Claim 52 (Currently Amended) A mortgage-backed securities index according to Claim ~~38~~ 40, wherein said index is rebalanced by of selecting a new set of mortgage-backed securities to be included in said mortgage-backed securities index, assigning said relative weight to each security within said new selected set, and calculating a new total return of said mortgage-backed securities index.

Claim 53 (Original) A mortgage-backed securities index according to Claim 52 wherein said index is rebalanced on a last business day of each month.

Claim 54 (Canceled)

Claim 55 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59 further comprising a storage segment, said storage segment storing data circulated within said system.

Claim 56 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59 further comprising a classification segment, said classification segment classifying said data for all outstanding mortgage-backed securities in accordance with a coupon value, issuing agency and original term of each of said outstanding mortgage-backed securities.

Claim 57 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~56~~ 59 further comprising an aggregation segment, said aggregation segment aggregating said outstanding mortgage-backed securities into a plurality of aggregated pools.

Claim 58 (Canceled)

Claim 59 (Original) A computer program for managing a mortgage-backed securities index ~~according to Claim 58~~ recorded on a computer-readable medium and executable on a general purpose computer, comprising:

an input segment for inputting market data into said system, said market data comprising data for all outstanding mortgage-backed securities;

a selection segment for selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, said set of mortgaged-backed securities being selected from said all outstanding mortgage-backed securities;

a weight segment for assigning a relative weight to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to a total outstanding principal on all securities within said selected set; and

a total return segment for calculating a total return of said mortgage-backed securities index, said total return being calculated based on said assigned relative weight of said each security within said selected set, and a total return of said each security within said selected set based on a same-day-settle price.

wherein said selection segment further comprises a segment for calculating an inclusion criterion for each of said aggregated pools, and wherein said inclusion criterion is given by the following equation:

$$x_{c,t} = \frac{\left[\sum_{a = \left\{ \begin{matrix} \text{FNMA} \\ \text{GNMA} \\ \text{FHLMC} \end{matrix} \right\}} \rho_{a,c,t} \right]}{\left[\sum_{\substack{a = \text{FNMA, GNMA, FHLMC} \\ c = Z \\ t = 180 \text{ , } 360}} \rho_{a,c,t} \right]}$$

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

Claim 60 (Original) A computer program for managing a mortgage-backed securities index according to Claim 59, further comprising a segment for comparing said inclusion criterion for all of said aggregated pools to a threshold value, and including an aggregated pool in said selected set if said threshold is met.

Claim 61 (Original) A computer program for managing a mortgage-backed securities index according to Claim 60, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

Claim 62 (Original) A computer program for managing a mortgage-backed securities index according to Claim 60, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

Claim 63 (Original) A computer program for managing a mortgage-backed securities index according to Claim 59 wherein said relative weight of said each security within said selected set is given by the following equation: $w = \frac{\lfloor x_{c,t}\, \rho_{a,c,t} \rfloor}{\left[\sum_{\substack{a = FNMA,\ GNMA,\ FHLMC \\ c \in Z \\ t = 180\ ,360}} \rho_{a,c,t} \right]}$, wherein w is said relative weight of said each security within said selected set.

Claim 64 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59 wherein said total return segment further comprises segment for calculating said total return of said each security within said selected set.

Claim 65 (Original) A computer program for managing a mortgage-backed securities index according to Claim 64 wherein said segment for calculating calculates said total return of said each security within said selected set on any given day t_2 in accordance with the following equation: $TR_{t_2}^{J} = \frac{-p_{t_1} + f_{t_1} p_{t_2} + \left[(1 - f_{t_1}) + \frac{c}{12} \right] \left[1 + r_{t_1} \frac{|d|}{360} \right]^{-k}}{p_{t_1}}$,

wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said each security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said each security is issued by GNMA or FHLMC} \end{cases}$$

and

$$k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

Claim 66 (Original) A computer program for managing a mortgage-backed securities index according to Claim 65, wherein said sequence of monthly pay-down factors is given by the following equation: $f_i = \frac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$, wherein $\rho_{\alpha,i}$ is the principal outstanding of pool α as of the first of month *i*, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month *i+1*.

Claim 67 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59, wherein said same-day settle price is given by the following equation: $p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}}$,

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day *t*; wherein d_1 is the number of days into the month that 1-month forward standard PSA settle occurs; wherein d_2 is the number of days in between the purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the

purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

Claim 68 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1 + TR_i\right)\right]\left(1 + TR_{t_2}\right) - 1$$

when $k < n-1$, wherein TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the Index for the month k, and wherein TR_i is the total return of the index for any intermediate month between k and n.

Claim 69 (Original) A computer program for managing a mortgage-backed securities index according to Claim 68, wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_{i1}^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j},$$ wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $$TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j},$$

wherein $\{w_i^j\}_{j=1}^n$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

Claim 70 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = TR_{t_2} - TR_{t_1}$$

when k=n, wherein TR_{t_1} is the total return of said index on the day t_1, and TR_{t_2} is the total return of said index on the day t_2.

Claim 71 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left(1 + TR_{t_2}\right) - 1$$

when k=n-1, wherein TR_{t_1} is the total return of said index on the day t_1, wherein TR_{t_2} is the total return of said index on the day t_2 and wherein TR_k is the total return of the index for the month k.

Claim 72 (Currently Amended) A computer program for managing a mortgage-backed securities index according to Claim ~~54~~ 59, further comprising level segment, said level segment determining a level of said mortgage-backed securities index.

Claim 73 (Original) A computer program for managing a mortgage-backed securities index according to Claim 72 wherein said level is given by the following equation:

$$\frac{P_t}{P_{00/00/00}} = 1 + TR\,|^{t}_{00/00/00},$$

wherein P_t is said level of said mortgage-backed securities index on the day t,

wherein $P_{00/00/00}$ is a starting level of said index, and

wherein $TR\,|^{t}_{00/00/00}$ is the total return of said index from the starting date to the day t.

Claim 74 (Original) A computer program for managing a mortgage-backed securities index according to Claim 73, wherein said starting level of said index is 100.

Claim 75 (Original) A computer program for managing a mortgage-backed securities index according to Claim 72 further comprising an output segment, said output segment displaying said level of said mortgage-backed securities index and said total return of said mortgage-backed securities index to the user.

Claim 76 (New) A method for managing a mortgage-backed securities index, comprising the steps of:

a. selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, said set of mortgaged-backed securities being selected from all outstanding mortgage-backed securities;

b. assigning a relative weight to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to the total outstanding principal on all securities within said selected set;

f. calculating a total return of said mortgage-backed securities index, said total return being based on said assigned relative weight for said each security, and a total return of said each security based on a same-day-settle price;

g. storing the calculated total return of said mortgage-backed securities index in an index database; and

h. outputting the calculated total return of said mortgage-backed securities index to a user,

wherein said step of selecting a set of mortgage-backed securities further comprises aggregating said all outstanding mortgage-backed securities into a plurality of pools, each of said pools comprising mortgage-backed securities having the same coupon and the same original term, and determining inclusion criteria for each pool within said plurality of pools, said inclusion criteria being determined using an objective condition.